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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,008	06/04/2002	Grant Alan Ingram	202-0405	7208
7590 03/22/2006 KOLISCH HARTWELL, P.C. 200 PACIFIC BUILDING 520 SW YAMHILL STREET PORTLAND, OR 97204			EXAMINER TRAN, DIEM T	
			ART UNIT 3748	PAPER NUMBER

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No.	Applicant(s)	
	10/064,008	INGRAM ET AL.	
	Examiner	Art Unit	
	Diem Tran	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10, 12-17 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-17, 19, 20 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-10, 12, 13, 18, 23 and 27 is/are rejected.
- 7) ☐ Claim(s) 7, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to an amendment filed on 12/30/05. In this amendment, claims 1, 2, 8, 14 have been amended, claims 6, 11, 18 have been canceled and claims 24-27 have been added. Overall, claims 1-5,7-10,12-27 are pending in this application.

Claim Objections

Claims 21, 22 objected to because of the following informality:

-The last sentence in claim 21 is incomplete. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 8-10, 12, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoshi (US Patent 6,151,890).

Regarding claims 1, 8, 10, 12, 13, Hoshi discloses a method for controlling an engine have at least first and second groups of cylinders, the engine coupled to an emission control device, comprising:

in response to engine starting, and during emission control device warm-up:

operating the first group of cylinders at a first ignition timing; and operating the second group of cylinders at a second ignition timing more retarded than said first group, wherein said operation of the first and second groups of cylinders is further in response to an indication that the engine is operating in idle speed control (see col. 14, lines 42-67, col. 15, lines 1-3).

Regarding claims 2-4, 9, Hoshi further discloses adjusting at least one of airflow or injected fuel or ignition timing at least the first group of cylinders in response to a measured engine speed (see col. 17, lines 56-62).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi (US Patent 6,151,890) in view of Surnilla (US Patent 6,543,219).

Regarding claim 5, Hoshi discloses all the claimed limitations as discussed in claim 2 above, however, fails to disclose that said engine control signal is a desired engine torque. Surnilla teaches that it is conventional in the art, to retard ignition timing for each groups of cylinder in accordance to the desired engine torque (see col. 5, lines 27-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Surnilla in the Hoshi device, since the use

thereof would have improved the engine performance.

Regarding claim 27, Hoshi discloses a method for controlling an engine having at least first and second groups of cylinders, the engine coupled to an emission control device comprising:

in response to engine starting, and during emission control device warm-up; operating the first group of cylinders at a first ignition timing; and operating the second group of cylinders at a second ignition timing more retarded than that of the first group (see col. 14, lines 42-67, col. 15, lines 1-3), however, fails to disclose adjusting ignition timing of at least the first group of cylinders in response to a desired engine torque. Surnilla teaches that it is conventional in the art, to retard ignition timing for each group of cylinder in accordance to the desired engine torque (see col. 5, lines 27-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Surnilla in the Hoshi device, since the use thereof would have improved the engine performance.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koga et al. (US Patent 5,657,625).

Koga discloses a system comprising:

a 6 cylinder engine having first and second groups of 3 cylinders each;

a first exhaust manifold coupled to the first group; a second exhaust manifold coupled to the second group (see Figure 1); a controller for operating the first group of cylinders with ignition timing more retarded than the other group of cylinders during a first interval; and

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operating the second group of cylinder with ignition timing more retarded than the other group of cylinders during a second interval (see col. 16, lines 48-67, col. 17, lines 1-25); however, fails to disclose that said engine is a 10 cylinder engine.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a 10 cylinder engine in the system of Koga, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Allowable Subject Matter

Claims 14-17, 19, 20, 24-26 are allowed.

Claims 7, 21, 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed on 12/30/05 have been fully considered but they are moot in view of a new ground of rejection(s). The Examiner has reconsidered the indicated allowability of claims as shown in the last office action; therefore, a new non-final rejection is set forth above.

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Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:00 a.m.- 6:00p.m.

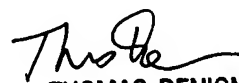
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 800-786-9199 (toll-free).

DT



Diem Tran
Patent Examiner
Art unit 3748



THOMAS DENION
SUPERVISORY PATENT EXAMINER
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